

Abstract of the Disclosure

A system and method of command signal conditioning in high response systems is disclosed. The system includes a central digital controller having a digital controller frame rate, a motor, a motor controller in communication with the digital controller and the motor, the motor controller having a motor controller frame rate higher than the digital controller frame rate, and a signal conditioner adapted to condition the command signal to produce a modified command signal at the motor controller frame rate. The signal conditioner is preferably implemented in software. In one embodiment, the signal conditioner is adapted to calculate a moving average at the frame rate of the motor controller. In another embodiment, the signal conditioner comprises a first order hold and a filter in communication therewith. A method of command signal conditioning in accordance with the foregoing is also disclosed.